

REMARKS

In the non-final Office Action, the Examiner objected to the proposed drawing correction, filed December 27, 2002, under 37 C.F.R. § 1.121(a)(6) as introducing new matter; rejected claim 5 under 35 U.S.C. § 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention; rejected claims 1, 2, 4, 5, 8-13, and 15-20 under 35 U.S.C. § 102(e) as anticipated by MEDARD et al. (U.S. Patent No. 6,047,331); rejected claims 6 and 21 under 35 U.S.C. § 103(a) as unpatentable over MEDARD et al. in view of HSING et al. (U.S. Patent No. 6,167,025); rejected claim 3 under 35 U.S.C. § 103(a) as unpatentable over MEDARD et al. in view of OHNO (U.S. Patent No. 6,252,853); rejected claim 7 under 35 U.S.C. § 103(a) as unpatentable over MEDARD et al. in view of OHNO, and further in view of CALLON et al., Network Working Group Internet draft, "A Framework for Multiprotocol Label Switching," November 21, 1997; and objected to claim 14 as containing allowable subject matter.

Applicants note with appreciation the indication that claim 14 contains allowable subject matter. Applicants amend claim 14 herewith to include the features of base claim 8 and intervening claim 9. Therefore, Applicants submit that claim 14 is patentable over the art of record.

By this amendment, Applicants further amend claims 1, 8, and 18 and add new claim 24. Applicants respectfully traverse the objection to the drawings and rejection of claims 1-13 and 15-21 noted above.

In the Office Action, the Examiner objected to the proposed drawing correction, filed

December 27, 2002, under 37 C.F.R. § 1.121(a)(6) as allegedly introducing new matter. In particular, the Examiner alleged that "[t]he original disclosure does to support the showing of 'alternative' on box 340 on fig. 3b" (Office Action, pg. 2). Applicants respectfully traverse.

Applicants proposed changing block 340 in Fig. 3b to read "ESTABLISH ALTERNATIVE INITIAL ROUTE." Support for this change can be found on page 8, lines 13-18, of Applicants' specification. This section of Applicants' specification discloses:

The same signaling protocol, RSVP, that was used to set up an initial route, is also used to establish an alternative route, as indicated in step 340. Use of the same signaling protocol to establishing routes not only achieves implementation simplicity, it also allows better system efficiency by merging routes of identical administrative constraints, as detailed in step 540. Once the initial alternative route is established, it can be used to forward packets upon failure of the initial route (emphasis added).

Applicants submit that this section of Applicants' specification supports the proposed drawing change submitted by Applicants on December 27, 2002.

For at least the foregoing reasons, Applicants request that the Examiner approve the proposed drawing change filed December 27, 2002.

Claim 5 was rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the Examiner alleged that "the subject matter not disclosed that one skilled in the art needs to make the device is the 'data ... stored in the configuration information'" (Office Action, pg. 2). Applicants respectfully traverse.

Contrary to the Examiner's position, claim 5 does not recite data stored in configuration information. Instead, Applicants' claim 5 recites that the processor computes an alternative route

not including a plurality of nodes associated with the downstream node and link as likely to fail according to network configuration data. Support for this feature can be found, for example, on page 11, lines 7-13, of Applicants' specification. Applicants submit that this section of Applicants' specification would enable one skilled in the art to make and/or use the invention, as recited in Applicants' claim 5.

For at least the foregoing reasons, Applicants request that the rejection of claim 5 under 35 U.S.C. § 112, first paragraph, be reconsidered and withdrawn.

Claims 1, 2, 4, 5, 8-13, and 15-20 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by MEDARD et al. Applicants respectfully traverse this rejection in light of the amended claims.

MEDARD et al. is directed to a method and apparatus for generating first and second tree topologies for any source node in a network to allow for recovery upon detection of a failure in the network (Abstract).

In contrast, Applicants' invention recites, for example in amended independent claim 1, that at least one In contrast, Applicants' invention recited, for example, in amended independent claim 1 recites that at least one of the nodes in the network comprises a processor to compute an alternative route for an initial route by identifying one or more alternative-route-enabled nodes, identifying downstream network elements, and generating the at least one alternative route based on the identified one or more alternative-route-enabled nodes and the identified downstream network elements, a storage space to store the initial route and the alternative route, a mechanism to detect failure in a downstream network element in the initial route, and a forwarder to automatically forward a packet to the next node. MEDARD et al. does not disclose or suggest

this combination of features.

For example, MEDARD et al. does not disclose or suggest a processor that computes an alternative route for an initial route by identifying one or more alternative-route-enabled nodes, identifying downstream network elements, and generating the at least one alternative route based on the identified one or more alternative-route-enabled nodes and the identified downstream network elements. MEDARD et al. does not distinguish between network nodes 12a-12e that perform alternative route forwarding and network nodes 12a-12e that do not. In fact, MEDARD et al. specifically discloses that each of network nodes 12a-12e store redundant tree topologies (col. 12, lines 15-19). Therefore, there would be no need to identify one or more alternative-route-enabled nodes when generating alternative routes in the MEDARD et al. system.

For at least the foregoing reasons, Applicants submit that claim 1 is not anticipated by MEDARD et al.

Claims 2, 4, and 5 depend from claim 1. Therefore, Applicants submit that these claims are not anticipated by MEDARD et al. for at least the reasons given above with respect to claim 1.

Amended independent claim 8 recites features similar to those described above with respect to claim 1. Therefore, Applicants submit that claim 8 is not anticipated by MEDARD et al. for reasons similar to those given above with respect to claim 1.

Claims 9-13 and 15-17 depend from claim 8. Therefore, Applicants submit that these claims are not anticipated by MEDARD et al. for at least the reasons given above with respect to claim 8.

Amended independent claim 18 recites features similar to those described above with

respect to claim 1. Specifically, amended independent claim 18 recites, *inter alia*, "storing, at each of the select intermediary nodes, the alternative route." MEDARD et al. discloses, in stark contrast, that all network nodes 12a-12e store redundant tree topologies (col. 12, lines 15-28).

For at least the foregoing reasons and for reasons similar to those given above with respect to claim 1, Applicants submit that claim 18 is not anticipated by MEDARD et al.

Claims 19 and 20 depend from claim 18. Therefore, Applicants submit that these claims are not anticipated by MEDARD et al. for at least the reasons given above with respect to claim 18. Moreover, these claims recite additional features not disclosed by MEDARD et al.

For example, claim 20 recites locating a set of established routes with a same destination device and same administrative constraints as the initial route; finding a common node, downstream from the failed node, after which the set of established routes and the initial route utilize the same network elements; establishing a new route from the common node to the destination device; and incorporating the new route into the alternative route. Applicants submit that MEDARD et al. does not disclose or suggest these features.

The Examiner failed to address the features recited in Applicants' claim 20. Therefore, the Examiner failed to establish a *prima facie* basis for denying patentability.

For at least these additional reasons, Applicants submit that claim 20 is not anticipated by MEDARD et al.

Claims 6 and 21 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over MEDARD et al. in view of HSING et al. Applicants respectfully traverse this rejection.

HSING et al. is directed to methods for detecting faults and restoring connections in networks (Abstract).

Claims 6 and 21 depend from claims 1 and 18, respectively. The disclosure of HSING et al. does not remedy the deficiencies in the disclosure of MEDARD et al. set forth above with respect to claims 1 and 18. Therefore, Applicants submit that claims 6 and 21 are patentable over MEDARD et al. and HSING et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claims 1 and 18.

Claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over MEDARD et al. in view of OHNO. Applicants respectfully traverse this rejection.

OHNO is directed to a system for circumventing a fault in a network (Abstract).

Claim 3 depends from claim 1. The disclosure of OHNO does not remedy the deficiencies in the disclosure of MEDARD et al. set forth above with respect to claim 1. Therefore, Applicants submit that claim 3 is patentable over MEDARD et al. and OHNO, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

Claim 7 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over MEDARD et al. in view of OHNO, and further in view of CALLON et al. Applicants respectfully traverse this rejection.

CALLON et al. is directed to the technical issues and requirements for the Multiprotocol Label Switching working group (Abstract).

Claim 7 depends from claim 1. The disclosures of OHNO and CALLON et al. do not remedy the deficiencies in the disclosure of MEDARD et al. set forth above with respect to claim 1. Therefore, Applicants submit that claim 7 is patentable over MEDARD et al., OHNO, and CALLON et al., whether taken alone or in any reasonable combination, for at least the reasons

given above with respect to claim 1.

New claim 24 recites at least one first node configured to store an initial route from the source device to the destination device and at least one alternative route from the source device to the destination device, detect a failure in a downstream network node in the initial route, and automatically forward a packet to a node on one of the at least one alternative route in response to detecting the failure; and at least one second node configured to store the initial route, detect a failure in a downstream network node in the initial route, and forward a failure message to an upstream first node in response to detecting the failure, where the failure message causes the upstream first node to automatically forward a packet to a node on one of the at least one alternative route. Applicants submit that the art of record does not disclose or suggest this combination of features.

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of pending claims 1-21 and 24.

If the Examiner does not believe that all pending claims are now in condition for allowance, the Examiner is urged to contact the undersigned to expedite prosecution of this application.